



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,597	07/18/2003	Donald David Karlov	MSFT-1794/303770.1	4306

41505 7590 11/22/2006

WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION)
CIRA CENTRE, 12TH FLOOR
2929 ARCH STREET
PHILADELPHIA, PA 19104-2891

EXAMINER

NGUYEN, HAU H

ART UNIT	PAPER NUMBER
----------	--------------

2628

DATE MAILED: 11/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/622,597	KARLOV, DONALD DAVID	
	Examiner	Art Unit	
	Hau H. Nguyen	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 2-8, 14-19, 23 and 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 9-13, 20-22 and 25-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. This action is responsive to Applicants' Request for Continued Examination (RCE), filed September 5, 2006. Claims 1, 9-13, 20-22, 25-29 remain in this Application. As a result of Applicants' RCE, a new search has been performed. Rejections based on the newly cited references follow.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 9-13, 21-22, 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No. 6,016,151) in view of Pinedo et al. (U.S. Patent No. 5,224,210).

As per claim 1, Lin teaches a method for rendering graphics on a display device for a computer system having a central processing unit 80 (Fig. 3), system random access memory 82, graphics card 40 comprising a graphical processing unit (such as 50, 51), a video random access memory (not shown but it is inherent for a typical computer system with a graphics card to display video), and a frame buffer 84, the method comprising:

rendering a complex graphic in the system random access memory with the central processing unit, the complex graphics including at least one of shading, texturing, alpha-blending, anti-aliasing, and sub-pixel manipulation; and

copying said complex graphic from the system random access memory directly into the frame buffer by the central processing unit (col. 6, lines 33-58).

Thus, Lin teaches all the limitation of claim 1, except that copying directly into the frame buffer bypasses the graphical processing unit.

However, Pinedo et al. teach this feature. As shown in Fig. 1, Pinedo et al. teach a method for rendering graphics, comprising a central processing unit (host processor 20), a graphics processor (rendering circuitry 60) wherein the host processor bypasses the graphics pipeline to write directly into the frame buffer 70 (col. 1, line 63 through col. 8, line 27).

Therefore, it would have been obvious to one skilled in the art to utilize the method as taught by Pinedo et al. in combination with the method as taught by Lin in order to reduce the pipeline overhead and provide fast block operation, thereby enhancing rendering performance (col. 8, lines 22-27).

As per claim 9, Lin also teaches said complex graphics comprising compositing of overlays (col. 3, lines 10-13).

As per claim 10, Lin further teaches the computer system comprising an AGP port between the CPU, the main memory, and the graphics card (col. 11, lines 59-61).

As per claims 11 and 12, as cited above, Lin teaches the graphics card comprising a graphics accelerator/ graphics coprocessor 40.

Claims 13, 21-22, 25-28, which are similar in scope to claims 1, 9-12, are thus rejected under the same rationale.

Art Unit: 2628

4. Claims 20 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No. 6,016,151) in view of Pinedo et al. (U.S. Patent No. 5,224,210) further in view of Robertson et al. (U.S. Patent No. 5,670,984).

As per claims 20 and 29, as cited above, Lin and Pinedo et al. in combination teach all the limitations of claims 20 and 29, except that the complex graphics comprises an orientation-change graphic. However, this is what Robertson et al. teach. Robertson et al. teach a graphics processing method wherein the CPU performs orientation-change graphics and writes to the frame buffer (Figs. 6, 7A-B, col. 5, lines 51-54). Therefore, it would have been obvious to one skilled in the art to utilize the method as taught by Robertson et al. in combination with the method as taught by Lin and Pinedo et al. in order to provide faster image transformation (col. 4, lines 38-47).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hau H. Nguyen whose telephone number is: 571-272-7787. The examiner can normally be reached on MON-FRI from 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794.

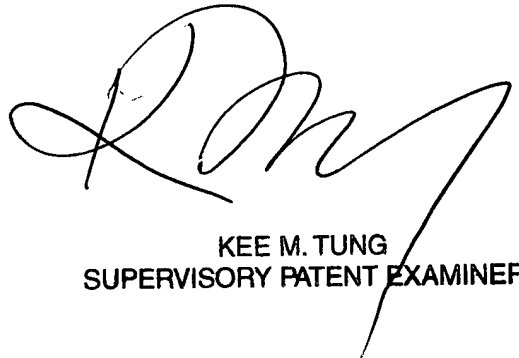
The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2628

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

H. Nguyen

11/16/2006



KEE M. TUNG
SUPERVISORY PATENT EXAMINER